

ay



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,893	09/29/2003	Gautam G. Reddy	I-2-0506.1US	6136

24374 7590 06/27/2005  
VOLPE AND KOENIG, P.C.  
DEPT. ICC  
UNITED PLAZA, SUITE 1600  
30 SOUTH 17TH STREET  
PHILADELPHIA, PA 19103

EXAMINER

NGUYEN, HUY D

ART UNIT PAPER NUMBER

2681

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/675,893

**Applicant(s)**

REDDY ET AL.

**Examiner**

Huy D. Nguyen

**Art Unit**

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 20-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14-19 is/are rejected.
- 7) ☒ Claim(s) 3 and 13 is/are objected to.
- 8) ☒ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01152004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-19, drawn to radiotelephone equipment detail, classified in class 455, subclass 550.1.

Group II. Claims 20-33, drawn to cellular system, classified in class 455, subclass 422.1.

The inventions are distinct, each from the other because of the following reasons:

2. They have acquired a separate status in the art as shown by their different classification.
3. They have acquired a separate status in the art because of their recognized divergent subject matter.
4. During a telephone conversation with Steven J. Gelman on 6/22/2005 a provisional election was made to prosecute the invention of group I, claims 1-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 20-33 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2681

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 4-5, 8-12, 14-15, 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Moon et al. (U.S. 6,804,532).

Regarding claims 1 and 11, Moon et al. teaches a wireless transmit/receive unit (WTRU) for infrastructure communication in a wireless network via network base stations and for peer-to-peer communications with other such WTRUs comprising: transceiver components that are configured for selective operation in an infrastructure communication mode for infrastructure communication with a network base station (e.g., wireless communications with base station 18 – see column 13, lines 49-52) and in a peer-to-peer communications mode for peer-to-peer communications with other WTRUs (e.g., wireless communications with other mobile stations 20 – see column 6, lines 3-6); and a transceiver controller configured to selectively control peer-to-peer mode communications with other WTRUs based on communication signals received in infrastructure communications with a network base station (see column 14, lines 57-67; column 15, lines 1-10).

Regarding claims 2 and 12, Moon et al. teaches the invention of claim 1 wherein the transceiver controller is configured with selected default control limits for peer-to-peer mode communications that can be overridden based on communication signals received in infrastructure communications with a network base station (see column 14, lines 41-56).

Regarding claims 4 and 14, Moon et al. teaches the invention of claim 1 wherein the transceiver components include a wireless local area network (WLAN) modem for the peer-to-peer communications with other WTRUs (see column 5, line 55 – column 6, line 9).

Regarding claims 5 and 15, Moon et al. teaches the invention of claim 1 wherein the transceiver controller is configured to control the transceiver components to switch between infrastructure communication mode and peer-to-peer communication mode based on Quality of Service criteria (see column 14, lines 57-67; column 15, lines 1-10).

Regarding claims 8 and 18, Moon et al. teaches the invention of claim 1 wherein the transceiver components are configured to selectively function in a relay mode to relay a communication between a network base station via infrastructure communication mode and another WTRU via peer-to-peer communication mode, and the transceiver controller is configured to control the transceiver components to function in the relay mode to based on Quality of Service criteria (e.g., in an Ad-hoc network, every mobile station can act as a repeater or a base station to relay communications between a network base station and another mobile station).

Regarding claims 9 and 19, Moon et al. teaches the invention of claim 1 wherein the transceiver controller is configured to control each peer-to-peer mode communications based on settings received in infrastructure communications with a network base station (see column 14, lines 41-56).

Regarding claim 10, Moon et al. teaches the invention of claim 1 wherein the transceiver controller is configured with selected default control limits for peer-to-peer mode communications (see column 14, lines 41-56).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-7, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon et al. in view of Do Nascimento, Jr. (US 2002/0128000 A1).

Regarding claims 6 and 16, Moon et al. teaches the invention of claim 1 except that the transceiver controller is configured to control the transceiver components to switch between infrastructure communication mode and peer-to-peer communication mode based on an estimate of the geographic location of the mobile unit. However, the preceding limitation is taught in Do Nascimento, Jr. (see paragraphs [0099], [0128]). It would have been obvious to one having ordinary skill in the art, at the time of the invention, to apply the teaching of Do Nascimento, Jr. to the teaching of Moon et al. in order to reduce or eliminate interference between mobile stations or between mobile station and network base station.

Regarding claims 7 and 17, Moon et al. and Do Nascimento, Jr. teaches the invention of claim 6 further comprising a Global Positioning System (GPS) for generating the estimate of the geographic location of the mobile unit (see Do Nascimento, Jr.: paragraph [0099]).

***Allowable Subject Matter***

9. Claims 3 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 3 and 13, the closest prior arts, Moon et al. and Do Nascimento, Jr., either singularly or in combination, fail to teach the invention of claim 2 wherein the transceiver controller selected default control limits for peer-to-peer mode communications include a maximum duration of a peer-to-peer communication and a restriction as to types of data traffic permitted in peer-to-peer communications.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Bahl et al. (US 2004/0204071 A1) teaches method for wireless capability discovery and protocol negotiation, and wireless device including same.
- Chan et al. (US 2004/0203638 A1) teaches service delivery systems and methods.
- Wurzburg (US 2004/0053602 A1) teaches low-cost interoperable wireless multi-application and messaging service.
- Willner et al. (US 2003/0032434 A1) teaches systems and methods to facilitate compliance with location dependent requirements.

Art Unit: 2681

***Contact Information***


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*hsj*

Huy Nguyen

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER